

OREGON TUALATIN VALLEY AMATEUR RADIO CLUB



An ARRL Special Service Club

March 1992

Next Meeting March 11, 1992

From The Presidents Desk

By Alan Churchill, AA7CV

Wouldn't you know. The one meeting I miss and great prizes were given out. Dam. I heard from many of you that the program by Larsen Antennas was especially good last month. The attendance was over 100 again so it looks like our club is growing rapidly right along with the hobby as a whole.

I usually don't do "book reviews" in this section of the newsletter but there is a story you simply must read. Go to your grocery store right now and pick up the March issue of Reader's Digest. A quick glance down the table of contents will tell you which story you are looking for. You're a tough guy who never cries? Better find a place alone for this one because you're going to have tears in your eyes after you read what ham radio did for one family.

1992 is well on it's way and this will be the last newsletter for those of you who haven't paid your 1992 dues. We're non profit, not philanthropic. If your newsletter looks a little thin this month just call Carl WS7L to solve your problem and get a complete copy of this newsletter.

This month two of our members really went out of their way to help me with technical problems and I appreciate it. It occurred to me that many of us have rigs that need some work so after discussing this with several others, we would like to suggest a "Drop In, Turn On and Tune Up" night for some future club meeting. Read about it elsewhere in this newsletter.

OTVARC has a service which some of you may not have heard about yet. You may want to read this paragraph to your non-ham spouse. After you collect ham gear for 40 years or so, what is your XYL or OM going to do with all your gear when you're gone? More than likely, he or she won't have the faintest idea of the value of your station. This may mean your valuable equipment gets sold for 5 cents on the dollar simply because nobody knows what to do with the stuff. OTVARC to the rescue. Tell your mate right now that our club has an inventory and evaluation service available. We will send out 2 or 3 of our best members to take inventory and let your spouse know what the reasonable value of your station is. Of course, you could do the same thing right now... But just in case you don't get around to it in time, remind your loved one that we're here to help. Contact any board member in case of need.

Finally, in answer to your many questions, yes, I did make money in Vegas but not enough to buy that TNC I was wanting. You know, I was doing so well until right before I had to leave...

73, Alan Churchill AA7CV

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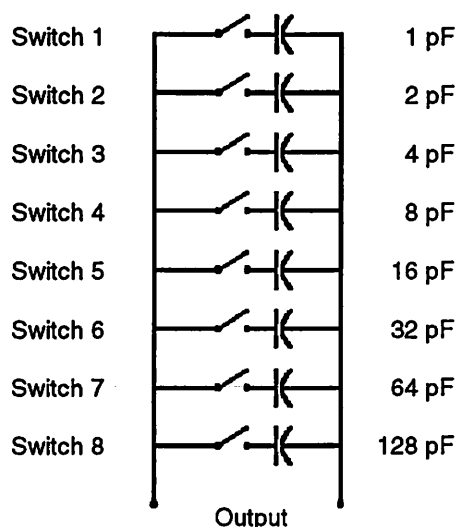
Another Stab at Tuning Antennas

by Alan Churchill, AA7CV

Building antenna tuners is a popular project because they contain few parts, are a needed station accessory and don't need "tuning" before they can be used. This article asks the question "Can we build an antenna tuner using fixed capacitors instead of variable capacitors?"

Your first question might be "Why would you want to do that"? Well, let's just say we wanted to tune an antenna remotely (think relays instead of switches) or maybe we couldn't find appropriate variable capacitors. Maybe we just want to do it because it would be interesting to see if it works!

Here is the concept. Using a total of 8 capacitors and 8 switches, we can select any value between 0 and 255 PF. The diagram below outlines how this could be done.



As an example, if we wanted 7 PF of capacitance, we would simply turn on switches 3, 2 and 1. This would add together 4+2+1 PF for a total of 7 PF. If we wanted 76 PF, we would turn on switches 7, 4 and 3. This system would allow us to create any value needed between 0 and 255 PF but is very unwieldy to use because we have to stop and figure out what values to add up before switching any switches. The circuit is simple, yes, but also hard to use in real life where you need a smooth continuous variance.

Next month we will address other switching methods that would allow this to work more easily but for the present time, let's just address the basic concept. The question at hand seems to be

1. Would it work. Can you switch capacitors on and off with switches and have it work?
2. Can we find capacitors of these values? If not, can they be created using standard values in series/parallel?
3. What ratings would be needed to handle a 200W transmitter?

If you have thoughts on this project please give me a call.

We'll bring it up at the next meeting so be ready with your thoughts. Next month we will delve into a better switching arrangement and publish your thoughts on if this would work. Who knows, we may end up with an all solid state fully automatic antenna tuner before we're done.

Upcoming Ham Test Sessions

By Alan, KO7B

<u>Date</u>	<u>Registration</u>	<u>Doors Close</u>	<u>Location</u>	<u>Contact</u>	<u>Phone</u>
March 14	12:00 P.M.	1:00 P.M.	PCC SE Center, Room B1 2850 SE 82nd	Lea Ball AL7W	777-1032
April 12	12:30 P.M.	1:30 P.M.	Portland Adventist Medical Center Educational Center A 10123 S.E. Market	Edith Litvin KA7MIF	642-5803

Please note that the March 14 exams at PCC SE Center will be in a different room from that used in prior exams.

Other items of interest:

Novice classes will begin on March 31 at Cedar Park School, Room A-11. You may register in advance through PCC, or register at the class site on the first night of classes. OTVARC member Tom Durell will be the primary instructor for these classes. The classes will be held from 7 to 9 PM each Tuesday evening through June 13 (or until you pass the Novice exam). Test sessions will be scheduled in conjunction with the classes to allow students an opportunity to qualify for a Novice license. And don't forget that OTVARC provides a scholarship which will reimburse the tuition fee for those who obtain their license as a result of taking the class.

OTVARC members put on test sessions during field day last June and then during the PCC upgrade classes last November and December. Several members have inquired as to whether or not OTVARC will provide testing on a regular basis in the future. Since other Portland area groups are sponsoring testing which provide monthly exam opportunities, there is no particular void which needs to be filled. OTVARC members will continue to put on special test sessions when it is believed that they will be of particular value.

There will be a test session provided at SEA-PAC on the morning of Saturday, June 13. Only those who register in advance will be served. Watch for details if you are interested.

OTVARC Want Ads

WANTED: The Sherwood School ham class is building a station for permanent use at the school. Jim Yohe has been helping the students with classes and equipment setup and now they need just a few more items to fill out the shack. Items still needed include a coax switch (2 position) and a dummy load (50 ohm). If you have either of these items you would like to donate, call Jim at his home or contact any board member.

WANTED: Service manual for S108 receiver. Circa 1960 Contact Will Sheffield N7THL at 642-7314.

WANTED: Want a good and reasonably priced 2 meter mobile rig for packet use. Contact Jim Washer KG7HH at 690-6703.

FOR SALE: A really good nearly new 11 element 2M beam. Also some good older Heath gear. Contact Ray Deeth K7VDQ at 324-4502.

STOLEN: Dale N7PEX had his favorite Alinco DJ160T stolen in the Beaverton area last Feb 22. Serial number is 0008342. It can be identified by a scratch on the speaker grill and a chipped keyboard lock key. If you see this rig, call Dale at 640-0217.

THANKS: A great big thank you to Bill N7VZF and Stan Griffiths W7NI for their donations of service and operating manuals for the club's Yaesu FT708R handheld. We put out a "help wanted" QST on the ARES net and within 3 days has two complete sets of manuals. Thanks guys.

UPCOMING EVENTS

BOARD MEETING:

The next board meeting will be on March 4, 1992, 7PM at Gene Buell's place. The address is 143rd & SW Jenkins. Look for the meeting room or call Gene for directions.

NEXT REGULAR MEETING:

It's going to be another good one. Our program will be all about packet radio and will be presented by our own Paul Schaff WB7BBG. Paul has been an active "Packet Person" for several years. He has built up systems using DOS, CPM and Radio Shack laptops so he knows whereof he speaks. Also, he is a challenger to Stan Griffiths for the "Nicest Guy in the World" title.

SEA-PAC UPDATE:

Oh My! Things are going full speed ahead for Sea-Pac. Latest reports from Randy Stimson KZ7T indicate we have nearly every big manufacturer signed up. If you haven't signed up for your security slot yet, call any of the four members of the Sea-Pac committee. They will let you know what time slots are left and give you your chance at the free handheld. The four members are Randy, KZ7T, Al Berg WB7SIC, Pat Griffiths KA7UFG and Jim Schaeffer KB7ADH. Their phone numbers are listed in the "contacts" section of this newsletter. SEA-PAC is June 12, 13 & 14 this year.

TUNE-UP NIGHT:

Remember the 60's? Tune In, Turn On and Drop Out? Well, we are thinking of having a Drop In, Turn On and Tune Up night at OTVARC. Many of us have older gear which maybe needs a little tender loving care with a scope and alignment tool. Others of us have a truckload of test equipment and the knowledge of how to use it. Tune-UP Night is when we bring these two together for a dramatic increase in power output, S/N Ratio and just plain fun. The night doesn't have a date yet but we will discuss this at the next meeting. If there is enough interest we might get some of this old gear tuned up in time to sell at Sea-Pac.

OTVARC ON THE AIR:

Well, the test went well. Wes Allen K7WWG donated his repeater time just like he said, we went on the air from 7PM to 7:30 and the question of legality seems to be solved. This means we will be having OTVARC On The Air every month on the third Wednesday of the month from 7 - 7:30PM. We will go over what took place at the previous meeting as well as give a peek at the next meeting. Thanks to all of you who took part. Tune in to 146.90.

ELECTRONICS FLEA MARKET:

Mark your calendars for March 7 9AM to 5PM for the 11th annual Mike & Key ARC swapmeet. It is at the Puyallup Fairgrounds (about 2 hrs from Portland) and will cover 44,000 feet. VE exams are at 10AM and again at 1PM. VE exams are \$5.40 and are walk-in only. If you have a few items for sale there is a consignment table available. For info call 206-821-4188 or talkin on 146.82. Admission is \$5 at the door and after noon it is only \$3 so make it a pleasant day trip and pick up some good deals in the bargain.

SEA-PAC Update

By Randy Stimson, KZ7T

There isn't a lot to report on the convention as it is still early. We have over 40 exhibitors that have said yes. All of the big guns are coming. Gene, K7IUN, has some very good seminars lined up. There are some different seminars this year. Betty, N7REX, has the Ladies program finished and well organized which is normal for Betty. The registration are beginning to roll in even with out the main brochure being mailed. By the way the main brochure will be mailed in March then we will get up to 40 registrations a day. We will have 4 extra disabled parking spots on the west side of the Convention Center. We are having fair luck on getting security people to sign up. Please, at the next meeting sign up for security and if you need to change we can arrange it.

J-Pole Antenna Corrections

Here is an update to the J-Pole antenna described in the January 92 issue of this newsletter. You may want to go back to that issue and make corrections in ink.

	<u>As Printed in January</u>	<u>Correct Value</u>
Total length from bottom to top:	54.00 inches	48.25 inches
Measurement from bottom to notch:	16.50 inches	15.25 inches

These measurements will give you under a 2:1 SWR across the whole two meter band. Incidentally, this antenna works great and for hardly any money.

To tune the antenna, cut it a little long and then trim the top off 1/8" at a time. You will find you can also trim the grounded (notched) side of the antenna 1/8" at a time and make a big difference in SWR. If you suspect you have trimmed off too much, simply solder a 1 or 2" piece of hookup wire to the "over trimmed" section and start over again.

NOTES ON OTVARC HAPPENINGS

ARRL DUES UPDATE:

Dues for ARRL membership is \$30 (not \$24) per year for the US and possessions. If you join or renew your membership in the ARRL through OTVARC, we get to keep \$2 for the trouble. This is an excellent money maker for us so we urge you to see Carl Clawson WS7L when your renewal notice comes up. Thanks.

MEMBER BADGES:

Most of us wear OTVARC badges at the meetings. To get yours, see Paul Schaff WB7BBG at the meeting. Cost is only \$4 and we will all know who you are from now on. If you wish to remain anonymous, simply don't tell Paul who you are when you order your badge and he won't make one up for you. The price is still \$4. If you do it this way you still remain a mystery person and the club gets \$4. We are truly a service club folks.

TECHNICAL COMMITTEE NEEDED:

How do you spell service? How about 10 years of service as the technical committee. This describes Dee Lynch KA7NPN and Terry Biggs WB7CHK. After this much time, these two great guys deserve a rest. If you are technically inclined and want to be a hero to us new guys, just grab a hold of any board member and let us know of your interest. We'll fill you in on the highlights and welcome you to the growing list of "Club Contacts".

EMERGENCY SERVICES COORDINATOR:

Yes. We have one. He is Tim Taylor N7UCA and he brings to us a wealth of enthusiams and knowledge. He will be asking all of us soon for some input on what our resources are and what direction he sees us going this year. If you have an interest in emergency services and want to join in Tim's group, call him at 292-6830.

NEWSLETTER EDITOR NEEDED:

We are still looking for an editor for the newsletter. Layout and production are covered, but we still need an editor to round up articials and coordinate input for this publication. No experience needed. Please contact Alan Churchill, AA7CV, at 639-5660.

Emergency Services

By Randy Stimson, KZ7T

One of the reasons that we have our radio frequencies is that in an emergency the hams are the only people that get through. For instance the earth quake in Mexico City, the Hurricanes in the Caribbean and many other disasters. The FCC allows us blocks of frequencies where the commercial companies only get single frequencies. I happen to see the 150 MHz and 450 MHz frequencies users in Oregon. There are up to ten companies using the same frequency. The only way they can do that is by using PL (Sub-Audible) tones. But that is another whole story.

To explain a little more we get 144.000 MHz to 148.000 MHz on the two meter band 222.000 MHz to 225.000 MHz and 420.000 MHz to 450.000 MHz and so forth. It is the same in the HF (High Frequency) bands. The only difference is that some portions of the HF bands deals with agreements in World Amateur Radio Counsel.

The one thing hard to do is to stay ready for an emergency. The way we do it is with Simulated Emergency Test (SET). People get tired of SETs. It is all make believe and hard to really get serious, even though it is. Some people will say that when the real thing comes along they will help.

Well I wish it was that simple. These people who don't want to practice can do more harm, on the average, than good because they are not use to nets, message handling, having a sense to know when to break and when to listen on a net. I listened to some of the nets during the Hurricanes and it was unbelievable. It was so bad the FCC got involved. Most of them were well meaning people but frustrated because they didn't understand and know the procedure.

One way we get around this problem is through Public Service Events. This is where we help with such things as runs, bicycle tours or races, walkathons and many other events. Public service is one of the best ways to practice communicating. There are all kinds of problems that you can encounter. From working all night with batteries that are 90% dead, but still doing the job, to loosing repeaters at an inopportune time. Working a event 150 miles in two days on simplex because there were no repeaters. We used high points and relays and got along very well. Learning to think out what you are going to say with the least numbers of words but good enough to get the idea across before you transmit.

A little story about that. At one of our nightly meetings on Cycle Oregon IV I felt that some people were talking too much to cover a subject so we discussed it. The next night they told me that I was doing the same thing. The only way you can learn is by doing. I didn't think that I did, but you don't listen to yourself. I try harder to do better just like the others. One other thing that works is to tape an hour of a net, that you are on, and listen to it. Some of the things you say you wouldn't believe.

One other advantage of doing public service is to learn to work with other people, not hams, in a close area for very long hours. To deal with all kinds of personalities. If I was in a real emergency, I would ask first for ARES (Amateur Radio Emergency Services) people and then public service people. I know that they have practiced and that it would take less time to organize them.

I would really like to see OTVARC form some sort of an ARES group, not necessarily the type that would have meetings and hold SETs. A lot of the members are involved with other organizations but the club would know that they had people who would and could help in an emergency. I would think the biggest thing that OTVARC would need to know of this group would be types of equipment, where they live, types of vehicle, which organization they belonged to, ect.

I just found out that Tim Taylor, N7UCA, would help organize the group. So if you see Tim at a meeting or get information from him please respond as we do need to get some type of a system.

Oregon Tualatin Valley Amateur Radio Club Presents



SEA PAC



ARRL NW DIVISION HAM CONVENTION
June 13 & 14, 1992
 Seaside Convention Center, Seaside Oregon
 NO SALES TAX IN OREGON



Convention Hours:
 Sat. Jun 13
 9am-4:30pm
 Sun. Jun 14
 9:30am-1:30pm

Note:
 The Convention Center
 is a no smoking facility.
 ORS 433.835 & 433.875

Banquet/Entertainment
 Awards Program
 100+ Flea Market Tables
 Commercial Exhibits
 QCWA Meeting

Friday ICOM Social Casino Night At Convention Center

30+ Seminars
 Yaesu Free Shuttlebus
 FARS CW Contest
 VE Testing (No Walk-ins)
 Ladies Luncheon & Activities

Exhibitors & Flea
 market setup
 starts at 11:00am
 Fri. Jun 12.
 Motel Assistance:
 in Oregon:
 800-444-6740
 Others:
 (503) 738-6391

EXHIBITORS:

For early reservations, please respond VIA: OTVARC, Box 219142, Portland, OR 97225-9142,
 or call Al WB7SIC at (503) 640-5456 or Randy KZ7T at (503) 297-1175 at any time.

MAKE CHECKS
 PAYABLE TO:
 SEA-PAC

REGISTRATION No. _____

Office Use Only

Mail To: OTVARC Box 219142 Portland, OR 97225-9142

_____ Registrations at \$5.00 ea. (\$7.00 at the door) -----	\$ _____
_____ Teens Convention Registration at \$2.00 ea. (No Awards) -----	\$ _____
_____ Children 12 and under FREE.	
_____ Flea Market Tables at \$10 per table per day or \$17 per table for 2 days	\$ _____
_____ Friday Social Casino Night at \$10.00 (300 person limit) -----	\$ _____
_____ Saturday QCWA Lunch at \$7.50 (150 person limit) -----	\$ _____
_____ Saturday Ladies Luncheon at \$7.00 (80 person limit) -----	\$ _____
_____ Saturday Banquet Halibut Dinner at \$17.00 ea -----	\$ _____
_____ Saturday Banquet Prime Rib Dinner at 17.00 ea -----	\$ _____
NOTE: Flea Market Participants must be registered for the convention.	
Total	\$ _____

Names (please print)

Calls

Names

Calls

Address _____

City _____

State _____

Zip _____

Phone(____) - _____

WORLDWIDE DISTRIBUTION



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Joe Borsch W7PNS

(503) 684-5201

Upcoming Events

- | | |
|-----------------|--|
| March 4 | OTVARC Board Meeting |
| March 11 | OTVARC General Meeting
Beaverton Elks Club |
| March 14 | Upgrade Test Session
P.C.C. Southeast Center |
| March 31 | Project Night |
| April 1 | OTVARC Board Meeting |
| April 8 | OTVARC General Meeting
Beaverton Elks Club |
| April 12 | Upgrade Test Session
Portland Adventist Med. Center |
| April 28 | Project Night |
| May 6 | OTVARC Board Meeting |
| May 13 | OTVARC General Meeting
Beaverton Elks Club |
| May 26 | Project Night |
| June 12, 13, 14 | Sea-Pac Ham Convention
Seaside, Oregon |
| September 29 | Project Night |
| October 27 | Project Night |

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The **OTVARC NEWSLETTER** is published monthly by the Oregon Tualatin Valley Amateur Radio Club, Inc.

The opinions, views and recommendations of its contributors are not necessarily those of the Club, its officers, advertisers or the Editorial Staff. Articles or letters may be submitted to:

Alan Churchill, AA7CV, Editor
14145 SW 98 Court
Tigard, Oregon 97224

Deadline for all material is the 20th of the preceding month.

All correspondence other than for this newsletter should be sent to:

Oregon Tualatin Valley Amateur Radio Club
Post Office Box 5132
Aloha, Oregon 97006-0132.

Meetings are held on the second Wednesday of each month.

Advertising Policy

Advertising space is available in this newsletter. This newsletter reaches nearly 250 hams in the Portland area each month and is a good investment of your advertising dollars. The present rates are:

Full Page	8" X 10"	\$40 / Month or \$400 / Year
Half Page	8" X 5"	\$25 / Month or \$250 / Year
Quarter Page	4" X 5"	\$15 / Month or \$150 / Year
Business Card	2" X 3"	\$ 7 / Month or \$ 70 / Year

Classified ads are no charge to members. To place a display or classified ad, contact the editor.

ABOUT OTVARC

Membership is open to any living human who has an interest in radio. We have three meetings per month - a board meeting (first Wednesday) at which all club business is transacted, a club meeting (second Wednesday) which is mostly social and educational and OTVARC On The Air (third Wednesday) which is a recap of the previous meeting. It is held from 7 - 7:30 PM on 146.90.

The purpose and intent of OTVARC is to be instrumental in helping the prospective as well as established Amateur to become a proficient communicator in the Amateur Radio Service. Additionally, the intent is to promote the advancement of Amateur Radio Service through the following five objectives:

1. Education & training of new and licensed amateurs.
2. Public Service during public events & community activities.
3. Emergency Communications during emergencies & disasters.
4. Hobby enhancement through meetings, nets and contests.
5. Social contact with other amateurs & interested persons.

TYPES OF MEMBERSHIP:

1. Full, licensed hams, \$10 / yr. All privileges.
 2. Associate, non hams, \$10 / yr. No vote, no elective offices.
 3. Family, \$5 / yr. Spouses, dependents residing with full member. Same privileges as full members.
 4. Life. See treasurer for details.
- In addition to the dues, there is a one time only initiation fee of \$2.00.

SPECIAL SERVICE CLUB:

OTVARC is an ARRL Special Service Club. This means (among other things) that the club benefits from you joining the ARRL through our club. To join or renew the ARRL, contact the treasurer at any regular meeting.

HOW TO JOIN:

Simply mail the appropriate dues to the Treasurer, Carl Clawson, WS7L, at the PO Box above. He will send you the needed member profile and put you on the membership list. We don't discriminate. You send us money and you're in, friend.

OREGON TUALATIN VALLEY AMATEUR RADIO CLUB

Executive Board

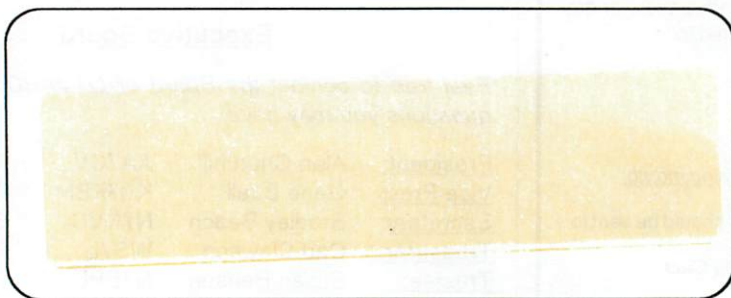
Feel free to contact the Board of OTVARC to answer any questions you may have.

<u>President:</u>	Alan Churchill	AA7CV	639-5660
<u>Vice Pres:</u>	Gene Buell	KA7KBH	646-7991
<u>Secretary:</u>	Bradley Beach	N7NVC	645-5232
<u>Treasurer:</u>	Carl Clawson	WS7L	629-5796
<u>Trustee:</u>	Susan Benson	N7EPE	640-1989
<u>Trustee:</u>	Al Berg	WB7SIC	640-5456
<u>Trustee:</u>	Pat Griffiths	KA7UFG	649-0837
<u>Trustee:</u>	Jim Schaeffer	KB7ADH	245-2518
<u>Trustee:</u>	Alan Roehl	KO7B	292-5243

Other Club Contacts

<u>Bingo Night</u>	Ray Deeth	K7VDQ	324-4502
<u>Contesting</u>	John Koenig	NB7W	641-3575
<u>DX News</u>	Ken Gilbert	WR7D	292-3497
<u>Equipment Valuation</u>	Randy Stimson	KZ7T	297-1175
<u>Emergency Services</u>	Tim Taylor	N7UCA	292-6830
<u>Field Day</u>	Carl Clawson	WS7L	629-5796
<u>Health & Welfare</u>	Al Berg	WB7SIC	640-5456
<u>Newsletter Editor</u>	Open		
<u>Newsletter Layout</u>	Jeff Durr	KA7AKU	645-3205
<u>Newsletter Distribution</u>	Al Berg	WB7SIC	640-5456
<u>Project Night</u>	Terry Biggs	WB7CHK	648-3687
<u>Public Service</u>	Randy Stimson	KZ7T	297-1175
<u>Repeater</u>	Wes Allen	K7WWG	649-3295
<u>Satellites</u>	Red Robert	AA7CP	357-5747
<u>Scholarship</u>	Pat Griffiths	KA7UFG	649-0837
<u>Sea-Pac</u>	Randy Stimson	KZ7T	297-1175
	Al Berg	WB7SIC	640-5456
	Pat Griffiths	KA7UFG	649-0837
	Jim Schaeffer	KB7ADH	245-2518
<u>Technical</u>	Terry Biggs	WB7CHK	648-3687
<u>Testing</u>	Alan Roehl	KO7B	292-5243
<u>Trailer</u>	Dee Lynch	KA7NPN	646-4580
<u>Training</u>	Open		
<u>Travelers</u>	Open		
<u>VHF / UHF</u>	Open		

FIRST CLASS MAIL



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